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EUROPEAN PATENT APPLICATION

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- (71) Applicant: DEPUY ORTHOPAEDICS, INC. Warsaw, Indiana 46581 (US)

- (72) Inventors:
 - McNulty, Donald E.
 Warsaw, Indiana 46580 (US)
 - Smith, Todd
 Fort Wayne, Indiana 46804 (US)
- (74) Representative: Fisher, Adrian John CARPMAELS & RANSFORD 43 Bloomsbury Square London WC1A 2RA (GB)
- (54) Cross-linked molded plastic bearings
- (57) A method is provided for forming a plastic prosthesis bearing, net-shape bearing, near net-shape bearing or plastic stock from which such a bearing can be formed. The method includes the steps of providing plastic resin in powdered form, subjecting the powdered

resin to irradiation to cross-link the resin, and molding the irradiated powder. The irradiated powder is molded by applying heat and pressure to form the powder into a desired solid plastic shape, the heating being sufficient to melt the powder.

-tegory	Citation of document with in of relevant passe	dication, where appropriate,	Refevent to claim	CLASSIFICATION OF THE APPLICATION (Int.CLS)
(WO 94 27651 A (HOWMEDICA) 8 December 1994 (1994–12-08) * page 4, line 21 - page 6, line 5; claim 1 *		1-20	829813/08 829C43/00 A61F2/02 //829K23:00
	WO 98 01085 A (SHEN (US); MCKELLOP HARRY 15 January 1998 (199 + page 1, line 27 -	98-01-15)	D 1-20	
	WO 97 29793 A (GEN F ;MASSACHUSETTS INST 21 August 1997 (1997 * page 12, line 7 -	TECHNOLOGY (US)) 7-08-21)	1-20	. 1. ¹ 2.
	EP 0 351 866 A (HIMO 24 January 1990 (199 + claim 1 +		1-20	
÷;	WO 98 14223 A (DU PC 9 April 1998 (1998-C * page 5, line 4 - p)4 – 09)	1-20	TECHNICAL FIELDS SEARCHED (INLCLI) B29B
	EP 0 729 981 A (BMG 4 September 1996 (19 * page 2, line 17 -	1 960904) .	1-20	
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	The present search report has b	oen drawn up for all claims		Exampler
Place of sourch MUNICH		24 July 2001	Sch	weissguth, M
	ATEGORY OF CITED DOCUMENTS	T : heav or princ	iple underlying the	invention
-	cubuly relevant disean alone	after the fling o	focument, but publi tate of in the application	sneg on, of

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 30 4482

This annex lists the patent tamily members relating to the patent documents cited in the above—mentioned European earror report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-07-2001

	Patent document ed in search repo		Publication date	Patent lamily member(s)	Publication date
WO	9427651	427651 A 08-1	08-12-1994	US 5414049 A	09-05-199
		• •		AT 171078 T	15-10-199
				AT 196095 T	15-09-200
			•,	AU 684500 B	18-12-199
				AU 6436494 A	20-12-199
•				DE 9490446 U	20-02-199
				DE 69413395 D	22-10-199
				DE 69413395 T	04-02-199
				DE 69425838 D	12-10-200
				DE 69425838 T	12-04-200
				EP 1005872 A	07-06-200
			·	EP 0701453 A	20-03-199
				EP 0847765 A	17-06-199
			•	ES 2122260 T	16-12-199
				JP 2836965 B	14-12-199
	•			JP 8509148 T	01-10-199
				US 6174934 B	16-01-200
				US 5449745 A	12-09-199
				US 5543471 A	06-08-199
				US 5650485 A	22-07-199
				US 5728748 A	17-03-199
			25 01 1009	AU 3655197 A	02-02-199
WU	9801085	A	15-01 -199 8	CA 2260241 A	. 15-01-199
				EP 0935446 A	18-08-199
				JP 2000514481 T	31-10-200
				US 6228900 B	08-05-200
					09-03-199
WO	9729793	Α	21-08-1997	US 5879400 A	
	•			AU 728605 B	11-01-200 02-09-199
				AU 2050697 A	21-08-199
	-			CA 2246342 A	17-03-199
				CN 1211195 A	14-04-199
				CZ 9802490 A	
				EP 0881919 A	09-12-199
			•	JP 2000512323.T	19-09-200
	-		•	PL 328345 A	18-01-199
		<u> </u>		WO 0105337 A	25-01-200
EP	0351866	Α	24-01-1990	US 5047446 A	10-09-199
		••		AT 147762 T	15-02-199
				AU 620880 B	27-02-199
				AU 3677689 A	08-03-199
				BR 8903636 A	13-03-199
				CA 1325864 A	04-01-199
				CN 1039817 A,B	21-02-199

For more details about this annex : see Official Journal of the European Patent Office, No. 12/8:

8

3

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 30 4482 -

This annex lists the patent family members relating to the patent documents ofted in the above—mentioned European Sear The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-07-2001

Patent docume cited in search re		Publication date		Patent tamily	Publication date
EP 0351866	A	1	DE	68927653 D	27-02-199
•			DE	68927653 T	12-06-199
			FI	893490 A	23-01-199
			JP	2069533 A	08-03-199
			JP	2655915 B	24-09-199
			KR	133685 B	21-04-199
			MX	17 0 695 B	07-09-199
			NO	892726 A,B,	23-01-199
			PT	91234 A,B	08-02-199
			ZA	8904688 A	28-03-199
WO 9814223	Α	09-04-1998	US	6017975 A	25-01-200
			AU	4742697 A	24-04-199
		-	EP	0935474 A	18-08-199
		·	us	6242507 B	05-06-20
EP 0729981	Α	04-09-1996	ĄΠ	693260 B	25-06-199
			ALI	3485595 A	09-04-199
	•	•	US	6168626 B	02-01-200
			CA	· 2177042 A	28-03-199
•		•	CN	1135762 A	13-11-199
			WO .	9609330 A	28-03-199

For more details about this annex : see Official Journal of the European Patient Office, No. 12/82